IN THE CLAIMS

The following is a complete listing of the claims, and replaces all earlier versions and listings.

1. (Currently Amended) Method of processing a coded digital signal ~~containing on the one hand~~ including a set of samples of different types obtained by coding a set of original samples representing physical quantities, and ~~on the other hand~~ including a set of information representing original samples and parameters used during the coding, ~~characterised in that it includes~~ said method including the ~~following~~ steps of:

[[-]] determining ~~the~~ a subset of samples corresponding to a selected part of the [[coded]] original digital signal using the set of information; [[,]]

[[-]] obtaining ~~the~~ a number of samples of at least one predetermined type and which are contained in the [[given]] determined subset of samples; [[,]]

[[-]] deciding ~~with regard to a modification of~~ whether or not to modify the determined subset of samples according to the obtained number of samples of the at least one predetermined type, before restoring the selected part of the original signal ~~obtained~~.

2. (Currently Amended) Method according to Claim 1, ~~characterised~~ in ~~that the aforementioned~~ which said determining, obtaining, and deciding steps are effected on reception of a request to obtain the part of the coded digital signal.

3. (Currently Amended) Method of processing a coded digital signal ~~containing on the one hand~~ including a set of samples obtained by coding a set of original samples representing physical quantities, and ~~on the other hand~~ including a set of information ~~concerning the~~ relating to a size w, h of the set of original samples and its resolution res, ~~characterised in that it includes~~ comprising the ~~following~~ steps of:

[[-]] locating a subset of original samples of given size zulx, zuly, zh, zw and resolution zres in the set of original samples according to the set of information ~~on~~ relating to the size w, h and the resolution res of this set; [[,]]

[[-]] determining, amongst [[the]] coefficients of ~~the~~ a low-frequency sub-band LL_o of ~~the~~ a last decomposition level obtained by decomposition into frequency sub-bands of the set of original samples, [[the]] a number of coefficients per dimension of the signal which correspond to the located subset; and [[,]]

[[-]] deciding ~~with regard to a modification of~~ whether or not to modify the size of ~~this~~ the located subset according to the ~~result of the determination step~~ determined number of low-frequency sub-band coefficients before restoring the located subset.

4. (Currently Amended) Method according to Claim 3, ~~characterised~~ in ~~that the~~ which said decision step ~~takes~~ includes taking into account at least one predetermined criterion representing a required quality level for the restoration of the subset of original samples of the digital signal.

5. (Currently Amended) Method according to Claim 3, ~~characterised in that the~~ in which said decision step ~~takes~~ includes taking into account at least one predetermined criterion representing a compromise between ~~the~~ a required quality level for the restoration of the subset of original samples and ~~the~~ a speed of processing for restoring ~~this~~ the subset of original samples.

6. (Currently Amended) Method according to Claim 3, ~~characterised in that it includes a~~ further comprising the step of modifying the size of the located subset of original samples.

7. (Currently Amended) Method according to Claim 6, ~~characterised~~ in ~~that~~ which the modification lies in an increase in the size of the subset of original samples.

8. (Currently Amended) Method according to Claim 7, ~~characterised~~ in ~~that~~ which by representing, in a space of dimensions corresponding to the dimensions of the digital signal, ~~on the one hand the~~ a position of the coefficients of the low-frequency sub-band of the last decomposition level and ~~on the other hand the~~ a position of the subset of original samples delimited by a boundary, the increase in the size of the subset consists of moving ~~its~~ the boundary so as to add to ~~this~~ the subset at least one coefficient of the low-frequency sub-band per dimension of the digital signal, ~~said~~ the at least one added coefficient being situated close to the boundary before the movement thereof.

9. (Currently Amended) Method according to Claim 6, ~~characterised~~ in ~~that~~ which the modification lies in a reduction in the size of the subset.

10. (Currently Amended) Method according to Claim 9, ~~characterised~~ in ~~that~~ which, by representing, in a space with dimensions corresponding to the dimensions of the digital signal, ~~on the one hand the~~ a position of the coefficients of the frequency sub-bands obtained by decomposition of the set of original samples and ~~on the other hand the~~ a position of the subset of original samples delimited by a boundary, the reduction in the size of the subset consists of moving ~~its~~ the boundary so as to remove part of ~~this~~ the subset and all the frequency sub-band coefficients situated in ~~this~~ the part of the substrate.

11. (Currently Amended) Method according to Claim 3, ~~characterised in that the~~ in which said decision step results in a preservation of the size of the located subset of original samples.

12. (Currently Amended) Method according to Claim 3, ~~characterised in that it also includes a~~ further comprising the step of increasing the size of the located subset of original samples which does not change the number of coefficients of the low-frequency sub-band corresponding to ~~said~~ the subset.

13. (Currently Amended) Method according to Claim 3, ~~characterised~~ in ~~that~~ which, by representing, in a space of dimensions corresponding to the dimensions of the digital signal, ~~on the one hand the~~ a position of the coefficients of the frequency

sub-bands obtained by decomposition of the set of original samples and ~~on the other hand~~ ~~the~~ a position of the subset of original samples delimited by a boundary, said method ~~includes~~ further comprising a step of adding to this subset at least one coefficient of a frequency sub-band other than the low sub-band per dimension of the digital signal, ~~said~~ the at least one added coefficient being situated close to the boundary before the movement thereof.

14. (Currently Amended) Method according to Claim 3, ~~characterised~~ in ~~that~~ which the set of original samples of the digital signal is separated into several zones T_1, ..., T_{15} which have each independently undergone a decomposition into frequency sub-bands according to at least one decomposition level and ~~the determination~~ said determining step ~~consists of~~ further comprises determining, for each zone, amongst the coefficients of the low-frequency sub-band of the last decomposition level obtained by decomposition into frequency sub-bands of the zone in question, the number of coefficients of this sub-band per dimension of the signal which correspond to the located subset.

15. (Currently Amended) Method according to Claim 3, ~~characterized~~ in ~~that~~ which the coded digital signal includes blocks of samples which have been coded independently.

16. (Currently Amended) Method of decoding a coded digital signal which has been processed by a method of processing a coded digital signal ~~containing on the one hand~~ including a set of samples obtained by coding a set of original samples representing

physical quantities and ~~on the other hand~~ a set of information ~~concerning~~ relating to a ~~the~~ size w, h of the set of original samples and its resolution res, ~~characterized in that the~~ in which said processing method ~~includes~~ the ~~following~~ steps of:

[[-]] locating a subset of original samples of given size zulx, zuly, zh, zw and resolution zres in the set of original samples according to the set of information on the size w, h and resolution res of this set;[[,]]

[[-]] determining, amongst ~~the~~ coefficients of [[the]] a low-frequency sub-band LL_o of [[the]] a last decomposition level obtained by decomposition into frequency sub-bands of the set of original samples, [[the]] a number of coefficients per dimension of the signal which correspond or not to the located subset; and [[,]]

[[-]] deciding ~~with regard to a modification of~~ whether or not to modify the size of ~~this~~ the located subset according to the ~~result of the determination step, the processing method including the following steps,~~ determined number of low-frequency sub-band coefficients, before decoding, and

~~the~~ said decoding method ~~including the following~~ comprises the steps of:

[[-]] extracting the samples from the coded digital signal corresponding to the located subset of original samples ~~whose~~ having a size which has possibly been modified; [[,]]

[[-]] entropic decoding of these samples;[[,]]

[[-]] ~~dequantisation~~ dequantization of the previously decoded samples;[[,]]

[[-]] reverse transformation of the decomposition into frequency sub-bands on the previously ~~dequantised~~ dequantized samples; and [[,]]

[[-]] restoration of the ~~selected~~ located subset of samples.

17. (Currently Amended) Method according to Claim 16, ~~characterised in that the~~ in which said extraction step ~~consists of~~ includes extracting from the digital signal the blocks of samples corresponding to the located subset of original samples ~~whose~~ having a size which has possibly been modified.

18. (Currently Amended) Method according to Claim 16, ~~characterised~~ in ~~that~~ which the digital signal is an image signal, the samples of the image being arranged to constitute the rows and columns of ~~this~~ the image.

19. (Currently Amended) (Currently Amended) Device for processing a coded digital signal having ~~on the one hand~~ a set of samples of different types obtained by coding of a set of original samples representing physical quantities and ~~on the other hand~~ a set of information representing original samples and parameters used during the coding, ~~characterised in that it has~~ comprising:

[[-]] means [[of]] for determining [[the]] a subset of samples corresponding to a selected part of the [[coded]] original digital signal using the set of information;[[,]]

[[-]] means ~~of~~ for obtaining the number of samples of at least one predetermined type and which are contained in the [[given]] determined subset of samples;[[,]]

[[-]] means ~~of~~ for deciding ~~with regard to a modification of~~ whether or not to modify the determined subset of samples, according to the obtained number of samples ~~obtained~~ of the at least one predetermined type; and

means for restoring the selected part of the original signal, said means of deciding being adapted to make a decision with regard to a modification of the determined subset of samples before said means of restoring restore the selected part of the original signal.

20. (Currently Amended) Device for processing a coded digital signal including ~~on the one hand~~ a set of samples obtained by coding a set of original samples representing physical quantities and ~~on the other hand~~ a set of information concerning ~~the~~ a size w, h of the set of original samples and its resolution res, ~~characterised in that it has~~ comprising:

[[-]] means ~~of~~ for locating a subset of original samples of given size zulx, zuly, zh, zw and resolution zres in the set of original samples according to the set of information of size w, h and resolution res of this set;[[,]]

[[-]] means ~~of~~ for determining, amongst ~~the~~ coefficients of ~~the~~ a low-frequency sub-band LL_0 of ~~the~~ a last decomposition level obtained by decomposition into frequency sub-bands of the set of original samples, ~~the~~ a number of coefficients per dimension of the signal which correspond to the located subset;[[,]]

[[-]] means ~~of~~ for deciding ~~with regard to a modification of~~ whether or not to modify the size of ~~this~~ the located subset according to the ~~result of the determination step~~ determined number of low-frequency sub-band coefficients; and

means for restoring the located subset. said means for deciding being adapted to make a decision with regard to a modification of the size of the located subset before said means for restoring restore the located subset.

21. (Currently Amended) Device according to Claim 20, ~~characterised in that the~~ in which said decision means take into account at least one predetermined criterion representing a level of quality required for the restoration of the subset of original samples of the digital signal.

22. (Currently Amended) Device according to Claim 20, ~~characterised in that the~~ in which said ~~decision~~ means for deciding take into account at least one predetermined criterion representing a compromise between ~~the~~ a level of quality required for the restoration of the subset of original samples and ~~the~~ a speed of processing for restoring ~~this~~ the subset of original samples.

23. (Currently Amended) Device according to Claim 20, ~~characterised in that it has~~ further comprising means ~~of~~ for modifying the size of the located subset of original samples.

24. (Currently Amended) Device according to Claim 23, ~~characterised in that the modification~~ wherein said means for modifying comprise ~~more particularly~~ means of increasing the size of the subset of original samples.

25. (Currently Amended) Device according to Claim 23, ~~characterised in that the modification~~ in which said means for modifying comprise ~~more particularly~~ means of reducing the size of the subset.

26. (Currently Amended) Device according to Claim 20, ~~characterised in that the decision~~ wherein said means for deciding lead to a preservation of the size of the located subset of original samples.

27. (Currently Amended) Device according to Claim 20, ~~characterised in that it also has~~ further comprising means of increasing the size of the located subset of original samples which do not modify the number of coefficients of the low-frequency sub-band corresponding to ~~said~~ the subset.

28. (Currently Amended) Device according to Claim 20, ~~characterised in that~~ wherein the set of original samples of the digital signal is separated into several zones T_1, ..., T_{15} which have each independently undergone a decomposition into frequency sub-bands according to at least one decomposition level and the ~~determination~~ means for determining determine, for each zone, amongst the coefficients of the low-frequency sub-band of the last decomposition level obtained by decomposition into frequency

sub-bands of the zone in question, the number of coefficients of this sub-band per dimension of the signal which correspond to the located subset.

29. (Currently Amended) Device according to Claim 20, ~~characterised in that~~ wherein the coded digital signal includes blocks of samples which have been coded independently.

30. (Currently Amended) Device for decoding a coded digital signal which has been processed by a device for processing a coded digital signal including ~~on the one hand~~ a set of samples obtained by coding a set of original samples representing physical quantities and ~~on the other hand~~ a set of information concerning ~~the~~ a size w, h of the set of original samples and its resolution res, ~~characterised in that the~~ wherein said processing device [[has]] comprises:

[[-]] means ~~of~~ for locating a subset of original samples of given size zulx, zuly, zh, zw and resolution zres in the set of original samples according to the set of information of size w, h and resolution res of this set;[[,]]

[[-]] means ~~of~~ for determining, amongst ~~the~~ coefficients of ~~the~~ a low-frequency sub-band LL_0 of ~~the~~ a last decomposition level obtained by decomposition into frequency sub-bands of the set of original samples, ~~the~~ a number of coefficients per dimension of the signal which correspond to the located subset;[[,]]

[[-]] means ~~of~~ for deciding ~~with regard to a modification of~~ whether or not to modify the size of this located subset according to the ~~result of the determination step;~~ determined number of low-frequency sub-band coefficients, said means for deciding

being adapted to make a decision with regard to a modification of the size of the located subset before said decoding device operates, and

~~the~~ said decoding device ~~having~~ comprises:

[[-]] means ~~of~~ for extracting samples from the coded digital signal corresponding to the located subset of original samples ~~whose~~ having a size which has possibly been modified; [[,]]

[[-]] means ~~of~~ for entropic decoding of these samples;[[,]]

[[-]] means of ~~dequantisation~~ dequantization of the previously decoded samples;[[,]]

[[-]] means of reverse transformation of the decomposition into frequency sub-bands on the previously ~~dequantised~~ dequantized samples; and [[,]]

[[-]] means of restoration of the ~~selected~~ located subset of samples.

31. (Currently Amended) Device according to Claim 30, ~~characterised in that the~~ wherein said ~~extraction~~ means for extracting extract from the digital signal the blocks of samples corresponding to the located subset of original samples ~~whose~~ having a size which has possibly been modified.

32. (Currently Amended) Device according to Claim 20, ~~characterised in that it is~~ adapted to process a digital signal which is an image signal, the samples of the image being arranged to constitute the rows and columns of ~~this~~ the image.

33. (Currently Amended) Device according to Claim 19, ~~characterised in that the determination, obtaining and decision~~ wherein said means for determining, said means for obtaining, and said means for deciding, are incorporated in:

[[-]] a microprocessor,

[[-]] a read only memory containing a program for processing the coded digital signal, and

[[-]] a random access memory containing registers adapted to record variables modified during the execution of said program.

34. (Currently Amended) Device according to Claim 20, ~~characterised in that the location, determination and decision~~ wherein said means for locating, said means for determining, and said means for deciding are incorporated in:

[[-]] a microprocessor,

[[-]] a read only memory containing a program for processing the coded digital signal, and

[[-]] a random access memory containing registers adapted to record variables modified during the execution of said program.

35. (Currently Amended) Device according to claim 30, ~~characterised in that the~~ wherein said extracting, entropic decoding, ~~dequantisation~~ dequantization, reverse transformation, and restoration means are incorporated in:

[[-]] a microprocessor,

[[-]] a read only memory containing a program for decoding the coded digital signal, and

[[-]] a random access memory containing registers adapted to record variables modified during the execution of said program.

36. (Currently Amended) ~~A means~~ Means ~~of~~ for storing information which can be read by a computer or a microprocessor storing instructions of a computer program making it possible to implement the processing method according to claim 3.

37. (Currently Amended) ~~A means~~ Means ~~of~~ for storing information which can be read by a computer or a microprocessor storing instructions of a computer program making it possible to implement the decoding method according to claim 16.

38. (Currently Amended) ~~An information~~ Information storage means which is removable, partially or totally, and which can be read by a computer or microprocessor storing instructions of a computer program making it possible to implement the processing method according to claim 3.

39. (Currently Amended) ~~An information~~ Information storage means which is removable, partially or totally, and which can be read by a computer or microprocessor storing instructions of a computer program making it possible to implement the decoding method according to claim 16.

40. (Original) A computer program which can be directly loaded into a programmable device, containing instructions or portions of code for implementing the steps of the processing method according to claim 3, when said computer program is executed on a programmable device.

41. (Original) A computer program which can be directly loaded into a programmable device, containing instructions or portions of code for implementing the steps of the decoding method according to claim 16, when said computer program is executed on a programmable device.